

LISA – SPECTROSCOPIC HANDHELD

The LISA is the latest handheld radio-isotope identifier (RIID) from ENVINET. The LISA uses identification capabilities that have been selected by the US Government for Border Protection and Coast Guard missions based on ID performance, ease of use, and the built-in calibration that completely removes annual maintenance. Advanced algorithms enhance the performance of the gamma detection system and the neutron detector is ³He-free, employing ⁶Li:ZnS technology to achieve class leading handheld sensitivity.



FEATURES

- Verifies radioactive threats
- Fast, accurate, rugged & simple to use
- Simultaneous correct ID of multiple isotopes in 30 seconds or less
- Continuous calibration (+/-0.5% @ 662keV)
- Lowest total cost of ownership with zero annual maintenance
- GPS, 3G, wireless and Bluetooth communication
- Class leading reach back software functions
- Identification method exceeds ANSI 42.34
- Innovative analysis method with effective resolution of 1.5% (LaBr3(Ce)) and 3% (NaI(Tl))

ORDERING INFORMATION

LISA can be selected as follows:

	NaI(Tl)	LaBr3(Ce)	Neutron	GPS
LISA-101-U-NG	X		X	X
LISA-111-U-NG		X	X	X

A LISA is delivered with following ancillaries

- 1 x Hard logistics case for both the LISA unit and its ancillaries.
- 2 x Rechargeable batteries.
- 1 x Mains powered fast battery charger for charging 1 battery.
- 1 x Car charger lead.
- 1 x MicroB USB to USB computer data cable.
- 1 x Carry strap.
- 1 x Printed Manual and Quick Start Guide.

	Unit	LISA-101	LISA-111
Spectroscopic detector			
Material		NaI(Tl)	LaBr ₃ (Ce)
Size	Inch	1.5x1.5	1.5x1.5
Dose rate range ^{1,2}	μSv/h	0.01... 10 ⁵	0.01... 10 ⁵
Calibration @ 662 keV	%	+/- 0.5 (Continuous through internal stabilization system)	+/- 0.5 (Continuous through internal stabilization system)
Energy resolution ¹	FWHM	typ. 8 %	typ. 3 %
Effective energy resolution ³	FWHM	typ. 3 %	typ. 1.5 %
Energy range	keV	25...3000	
Integrated neutron detector model LISA-500-N			
Material		⁶ LiFZnS blades	
Sensitivity		²⁵² Cf 20,000 n/s @ 2ft/s @ 0.25m	
Neutron GARRn ⁴		0.9 ≤ GARRn ≤ 1.1 ²⁵² Cf and ¹³⁷ Cs (0.1 mSv/hr) @ 2m	
Environmental specification			
Operation temperature	°C °F	-32...+50 -25...+122	
Protection class		IP65 per IEC 60529	
Humidity	%	3-98% relative humidity, non-condensing, 35°C (95°F)	
Electrical specification			
Power		110-240V mains and 12-24V car adaptor or USB	
Audio input / output	V	Input: Internal microphone Output: Internal speaker and 3.5mm headphone jack	
Communication interfaces		Bluetooth WiFi 3G USB microB	
Data format		ANSI N42.42	
Display		3.7" 640x480 transreflective LCD display with backlight	
Size and weight specification			
Dimensions	mm (in)	290 x 130 x 137 (11.4 x 5.15 x 5.4)	
Weight	kg (lb)	1.85 (4.1)	
Operation			
Battery		8 hrs. operation	
Keypad		Three (3) button optimized for use with one hand, gloved	
Alerts and notifications		Audio, tactile (vibration), LED and display alerts	
PC Interface software		Fully featured event viewer and web interface	
Response time		Start-up 30 seconds	
Optional accessories		Replacement Battery	

¹ Cs-137 ² With integrated gamma dose rate ³ Realized by analysis method ⁴ Gamma Absolute Rejection Ratio for neutrons